

00-439.  
**BELLSOUTH**

**BellSouth**  
Suite 900  
1133-21st Street, N.W.  
Washington, D.C. 20036-3351

ben.almond@bellsouth.com

**Ben G. Almond**  
Vice President-  
Federal Regulatory

202 463-4112  
Fax 202 463-4198

September 27, 2000

**RECEIVED**

SEP 27 2000

Mr. Dale N. Hatfield  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., Room 7-C155  
Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

RE: Final Service Disruption Report

Dear Mr. Hatfield:

Pursuant to the requirements of the Commission's Order in CC Docket 91-273, released February 27, 1992, BellSouth Telecommunications, Incorporated submits a Final Service Disruption Report for a service outage that occurred on August 28, 2000.

The attached final report completes our response on the August 28, 2000 outage. It includes an update of the information previously provided in the 120 Minute Initial Service Disruption Report that was sent to the Commission's Watch Office on August 28, 2000.

- If you have any questions concerning this report, please contact the undersigned.

Sincerely,



Ben G. Almond  
Vice President-Federal Regulatory

Attachment

Cc: Robert Kimball

## FINAL SERVICE DISRUPTION REPORT

This Final Service Disruption report is filed by BellSouth Telecommunications Inc., in accordance with both the First and Second Report and Order Amendment of Part 63.100 of the Federal Communications Commission's rules. A 120-minute Initial Service Disruption Report for this August 28, 2000 outage in Atlanta, Georgia was filed with the FCC Watch Officer on August 28, 2000.

### GEOGRAPHIC AREA AFFECTED:

This outage involved a fiber system located in metropolitan Atlanta between Atlanta-Buckhead and Dunwoody in LATA 438.

### DURATION OF OUTAGE:

Further investigation determined carrier system alarms were received at 12:55PM EDT. Carrier systems were restored at 1:55PM EDT for a total duration of 1 hour.

### ESTIMATED NUMBER OF CUSTOMERS AFFECTED:

There were approximately 65,860 customers that could have been affected during this facility outage.

### TYPES OF SERVICE AFFECTED:

Inter-Office and Intra-LATA services were affected during this outage.

Primarily, there was blockage on several inter-office, local trunk groups between the following BellSouth end offices (ALPRGAMA47C, MCDNGAGS95A, ATLNGAAD69F, BRMNGAES53A, PWSPGAAS94A, WDSTGACR92E, MRTTGAMA42G, DLLSGAES44A, VLRCGAES45A, DNWDGAMA67A, ATLNGASSDS1, ATLNGAPPDS2, CHMBGAMADS0, ATLNGAWDDS1, PTCYGAMA48C, RSWLGAMADS1, NWNNGAMA25C, RVDLGAMA99A, FRBNGAEB96A, MRRWGAMA96F, ATLNGAEP64A, STBRGANH47C, MCDNGAGS95A, ATLNGABH34F, ATLNGAHR79E).

### ESTIMATED NUMBER OF BLOCKED CALLS:

There were approximately 10,448 blocked calls during this event. BellSouth saved 13,762 calls from being blocked by implementing multiple reroutes in their inter-office trunking network.

## APPARENT OR KNOWN CAUSE OF THE INCIDENT:

On August 28, 2000, BellSouth field forces were working a planned fiber re-arrangement. A fiber involved in the re-arrangement fed the protect side of the 102S/T6x/Atlanta-Buckhead/Dunwoody system (which was the working side). When the fibers were opened, the 102S/T6x did not switch to the main side (due to the switch controller card having been optioned for "manual" mode instead of "auto" mode).

## ROOT CAUSE:

### Process Errors–Telco

- Facility Options in Alcatel 21130 multiplexer set to manual mode

## METHODS USED TO RESTORE SERVICE:

At 1:00PM ET, BellSouth surveillance personnel began investigating call blockage and single CCS7 link failures in the local Atlanta area. An outage bridge was established to determine the cause while specialists began implementing reroutes on BellSouth's inter-office trunk groups.

Multiple tickets were sent to field personnel at multiple sites, and Technical Support personnel further analyzed the situation with surveillance, analysis and field personnel. Service was restored when Technical Support directed the Atlanta-Buckhead central office technician to manually switch the 102S/T6X to the main side from the protect side (and call blockage began to clear

## STEPS TO PREVENT RECURRENCE:

A previous BellSouth internal memorandum addressing detailed option settings and recommendations for protection switching testing of all Alcatel 21130 rings is being redistributed, with estimated completion of October 15, 2000. ,

Field personnel corrected the option settings for this 21130 multiplexer. In addition, the Atlanta District is systematically rolling off the 21130 systems to a SONET platform.

BellSouth's Regional Technical Support Group-Transport is evaluating the feasibility of having the 21130 systems region-wide tested and options verified with the vendor (Alcatel); discussion is currently underway with target date of October 30, 2000.

## EVALUATION OF EFFECTIVENESS AND APPLICATION OF NRC RECOMMENDATIONS AND BEST PRACTICES

In the Network Reliability Council's Compendium of Technical Papers, the root cause of this failure is best described in Section A, Paragraph 5.1 where "process error" is listed as a cause of failure.

Paragraph 6.1.3 mentions "adherence to procedures" specifically and stresses the need to comply, utilize and benefit from existing standards and procedures. BellSouth has addressed this best practice by taking the actions noted in "Steps to Prevent Recurrence".

00-139

☒ 120 Minute  
Initial Report

# SERVICE DISRUPTION

☐ 72 Hour Initial  
Report

|  |   |           |   |  |
|--|---|-----------|---|--|
| <b>TO:</b><br>FCC WASH DC<br>Washington, D. C. | <b>FAX No.:</b> (202)-418-2812 or<br><del>FAX No. (202)-418-2812</del><br><b>Tel. No.:</b> (202)-632-6975 | <b>OR</b> | <b>TO:</b><br>FCC WASH DC<br>Columbia Operations Center<br>Columbia, Maryland | <b>FAX No.:</b> (301)-725-2521<br><del>Tel. No. (301)-725-2521</del> |
|--|---|-----------|---|--|

|  |   |
|--|---|
| <b>FROM:</b><br>BellSouth Telecommunications | <b>Reported Initiated By:</b><br>Kay Phelps |
|  | <b>Contact No.:</b> (404-321-2516)          |

Date of Incident: 8/28/2000 Time of Incident: 12:55 AM ☐ EST ☒ CST ☐  
 Date of BST's Knowledge of Incident: 8/28/2000 Time of Knowledge: 12:55 AM ☐ EST ☒ CST ☐  
 PM ☒ CST ☐

Estimated Number of Customers Affected: Actual: Potential 65,860

Duration of Incident: 1 hour Estimated Number of Blocked Calls: 10,448

|  |   |
|--|---|
| <b>Geographic Area:</b>  | <b>Types of Services Affected:</b>  |
| City: North East Atlanta   | <input type="checkbox"/> Intra-Office <input type="checkbox"/> 911                        |
| State: Georgia   | <input checked="" type="checkbox"/> Inter-Office <input type="checkbox"/> Congestion      |
| CLLI:  | <input checked="" type="checkbox"/> Intra-LATA <input type="checkbox"/> Operator Services |
| LATA #: 438  | <input type="checkbox"/> Inter-LATA <input type="checkbox"/> LIDB/800                     |
| <input type="checkbox"/> Rural <input checked="" type="checkbox"/> Metro <input type="checkbox"/> Suburban |   |

|  |  |
|--|--|
| <b>Switch Types:</b>                     | <b>Category of Incident Which Makes this Reportable:</b> |
| <input type="checkbox"/> ATT 1AESS       | <input type="checkbox"/> Local Switch                    |
| <input type="checkbox"/> ATT 5ESS        | <input type="checkbox"/> TOPS                            |
| <input type="checkbox"/> ATT STP         | <input type="checkbox"/> Tandem (Local)                  |
| <input type="checkbox"/> NTI DMS 100     | <input type="checkbox"/> Tandem (LATA)                   |
| <input type="checkbox"/> NTI DMS 100/200 | <input type="checkbox"/> SS7                             |
| <input type="checkbox"/> OTHER:          | <input type="checkbox"/> Congestion                      |
| <input type="checkbox"/> NTI DMS 200     | <input checked="" type="checkbox"/> Facility             |
| <input type="checkbox"/> NTI STP         | <input type="checkbox"/> Special 911                     |
| <input type="checkbox"/> Siemens EWSD    | <input type="checkbox"/> >50,000 Lines                   |
| <input type="checkbox"/> Ericsson STP    | <input type="checkbox"/> 30,000 to 49,999 Lines          |
| <input type="checkbox"/> Alcatel STP     | <input type="checkbox"/> Fire                            |
|  | <input type="checkbox"/> FAA/Media Attention             |

**Apparent or Known Cause of Incident:** While working on a fiber between Chamblee and Atlanta-Buckhead, Georgia, the 102 t6x between Dunwoody and Atlanta-Buckhead was opened, causing it to go down (part of the system was set to manual which prevented it from automatically switching to protect.

**Methods to Restore Service:** BellSouth manually switched the system to the main and service was restored

**Steps to Prevent Recurrence:** To Be Determined

|   |   |
|---|---|
| <b>BST Contact:</b> B. G. Almond<br>Director - Federal Regulatory<br>Tel #: (202)-463-4112<br>FAX #: (202)-463-4193 | <b>Date Faxed to FCC:</b><br><b>Time Reported To FCC:</b> AM <input type="checkbox"/> EST <input type="checkbox"/><br>PM <input type="checkbox"/> CST <input type="checkbox"/><br><b>FCC Contact:</b> |
|---|---|